

## **Finney County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 10/3/14

16 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Finney County economy.<sup>1</sup>

These 16 sectors have a total direct output of approximately \$1791 million and support 4,862.5 jobs in Finney County. Running the model for all 16 sectors simultaneously produces the following results:

Agriculture Contribution in Finney Co								
Impact Type <sup>2</sup>	Employment	%	Total Value	% of Gross	Output <sup>5</sup>	% of Gross		
		Employment	Added <sup>3</sup>	Regional		Regional		
				Product <sup>4</sup>		Product		
Direct Effect	4,862.5	21%	241,125,137.8	16%	1,790,547,672.4	117%		
Indirect								
Effect	1,093.3	5%	108,517,461.2	7%	183,660,198.7	12%		
Induced								
Effect	1,549.5	7%	108,007,135.5	7%	170,120,990.1	11%		
Total Effect	7,505.2	32%	457,649,734.5	30%	2,144,328,861.3	140%		

As shown in the above table, agriculture, food, and food processing supports 7,505.2 jobs, or 32% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$2144 million, roughly 140% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 16 agriculture, food, and food processing sectors is approximately \$458 million, or 30% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 30% of the total economy.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="http://www.implan.com/index.php?option=com">http://www.implan.com/index.php?option=com</a> content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

In the top ten by employment, Animal (except poultry) slaughtering, rendering, and processing is the top employer in the agriculture industry with 3,336.1 employees. This table also shows the amount of jobs that are created by the agriculture industry in Finney County.

Description	Total Employment	Total Output
Animal (except poultry) slaughtering, rendering, and processing	3,336.1	1,097,622,448.2
Grain farming	475.1	160,642,747.0
Cattle ranching and farming	456.8	416,018,467.9
Support activities for agriculture and forestry	454.2	5,571,083.3
Food services and drinking places	327.6	17,944,756.6
Wholesale trade businesses	231.6	46,051,156.5
Transport by truck	158.1	23,452,564.5
Monetary authorities and depository credit intermediation activities	133.9	45,158,530.5
Private hospitals	104.7	15,199,504.9
Services to buildings and dwellings	99.6	5,781,536.1

The Animal (except poultry) slaughtering, rendering, and processing industry directly contributes approximately \$1098 million to Finney County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Description	Total Employment	Total Output
Animal (except poultry) slaughtering, rendering, and processing	3,336.1	1,097,622,448.2
Cattle ranching and farming	456.8	416,018,467.9
Grain farming	475.1	160,642,747.0
Wholesale trade businesses	231.6	46,051,156.5
Monetary authorities and depository credit intermediation activities	133.9	45,158,530.5
Imputed rental activity for owner-occupied dwellings	0.0	30,464,537.8
All other crop farming	12.2	25,949,518.5
Fertilizer manufacturing	12.0	25,118,511.6
Transport by truck	158.1	23,452,564.5
Electric power generation, transmission, and distribution	29.5	21,922,230.3

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Finney County's economy.

Description	Employment	Output
Oilseed farming	5.44	5,024,086.95
Grain farming	475.14	158,501,281.74
All other crop farming	12.23	25,603,595.73
Cattle ranching and farming	456.76	410,462,066.65
Dairy cattle and milk production	3.02	3,507,121.09
Animal production, except cattle and poultry and eggs	25.58	7,437,973.02
Commercial hunting and trapping	1.05	236,508.76
Support activities for agriculture and forestry	454.21	5,345,803.74
Other animal food manufacturing	7.48	11,012,263.30
Animal (except poultry) slaughtering, rendering, and processing	3,336.13	1,073,237,182.62
Bread and bakery product manufacturing	1.24	236,924.92
Tortilla manufacturing	4.72	1,132,400.63
All other food manufacturing	42.79	14,645,716.67
Soft drink and ice manufacturing	11.40	8,328,691.48
Fertilizer manufacturing	12.03	24,266,511.92
Farm machinery and equipment manufacturing	13.32	6,912,133.69

All 105 counties in Kansas have Implan models and agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.